Keith Conant, Shellfish Biologist Shellfish Survey (Presented to SHAB on or around November 15th) 11/15/02

Due to overwhelming reports from fishermen on the poor state of the fishery this season a survey was conducted to estimate the percentage dead and dying scallops in the harbor. Two dives were made one in Third bend, and one off Abram's Pt. All scallops, and scallop shells were collected in an area approximately 40-sq. ft. around the boat. These scallops and shells were then sorted and counted. Seed scallops and dead shell were returned to the water, live adult scallops were kept for meat quality inspection.

"Adult" is defined as a live scallop greater than one year old. "Seed" is defined as a live scallop less than one year old. "Shell Recent" is defined as a dead scallop that had recently died. "Shell Summer" is defined as a dead scallop that had previously died last summer. "Shell Second Year" is defined as a dead scallop that had died at least two years ago. Scallop shells were classified according to whether the animal was dead or alive. Shells represented dead scallops. Based on the condition of the shells, they were categorized into recent, summer, or second year.

Third Bend

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Adult	Seed	Shell Recent	Shell Summer	Shell Second Year		
12% Total	13% Total	18% Total	11% Total	46% Total		
7% Classic	9% Classic	2% 2 nd Year	6% Classic			
4% Nub	4% Nub	4% Classic	3% Nub			
		10% Nub	2% Seed			
		2% Seed				

Abram's Pt.

Adult	Seed	Shell Recent	Shell Summer	Shell Second Year
11% Total	35% Total	10% Total	17% Total	25% Total
6% Classic	23% Classic	2% Classic	3% Classic	
5% Nub	12% Nub	3% Nub Adult	3% Nub Adult	
1% Nub >10mm		2.5% Nub	1% Nub	
		2.5% Seed	10% Seed	

These percentages suggest that a large number of dead shells are coming from 2001, as it does take more than a year to break down. A nearly equal amount of dead shell is coming from 2002, to be noted here however are the percentages from all age groups. Two exceptions vary from being nearly equal, and are probably due to differences in environment. The seed to adult ratio in Third Bend is not as high as at Abram's Pt., however this is also related to a difference in locality. The percentages of harvestable adults are fairly equal between classic adults, and nub adults; and upon further inspection all yielded high quality meats.

The conclusion of the surveys:

- 1. There is a large percentage of dead shell in these two locations, but dead shells are coming from a wide range of age groups including those left over from prior years.
- 2. Not all the nubs adults were dead or dving.
- 3. Nub adult mortality was nearly in equal in proportion to classic adults.
- 4. Both nub adults and classic adult were yielding good meats.
- 5. These two locations however, by observation alone compared to previous years do suggest a decline in the overall population.
- 6. Natural mortality rates are to be expected.
- 7. Further surveys will be conducted in different locations throughout the harbor.